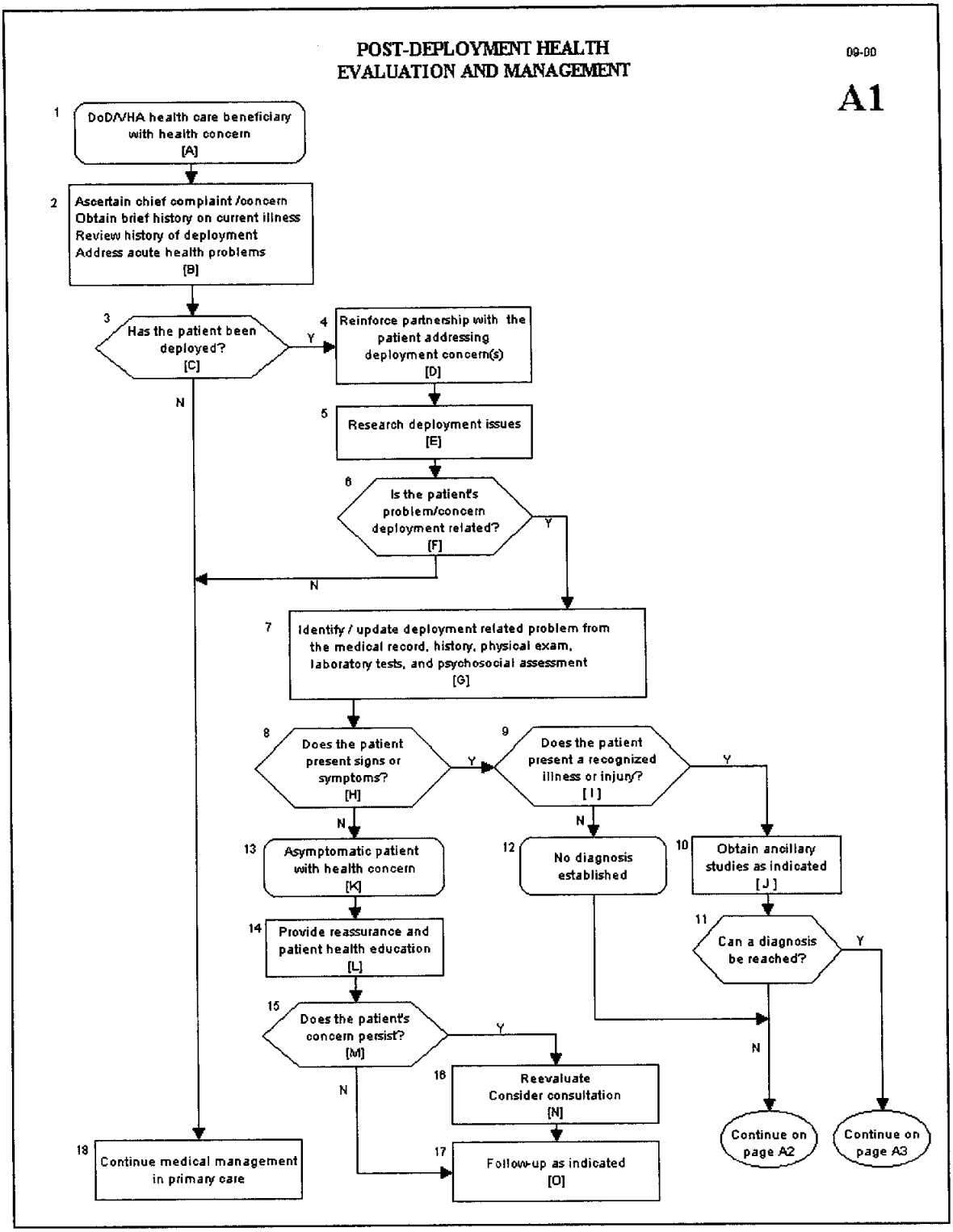
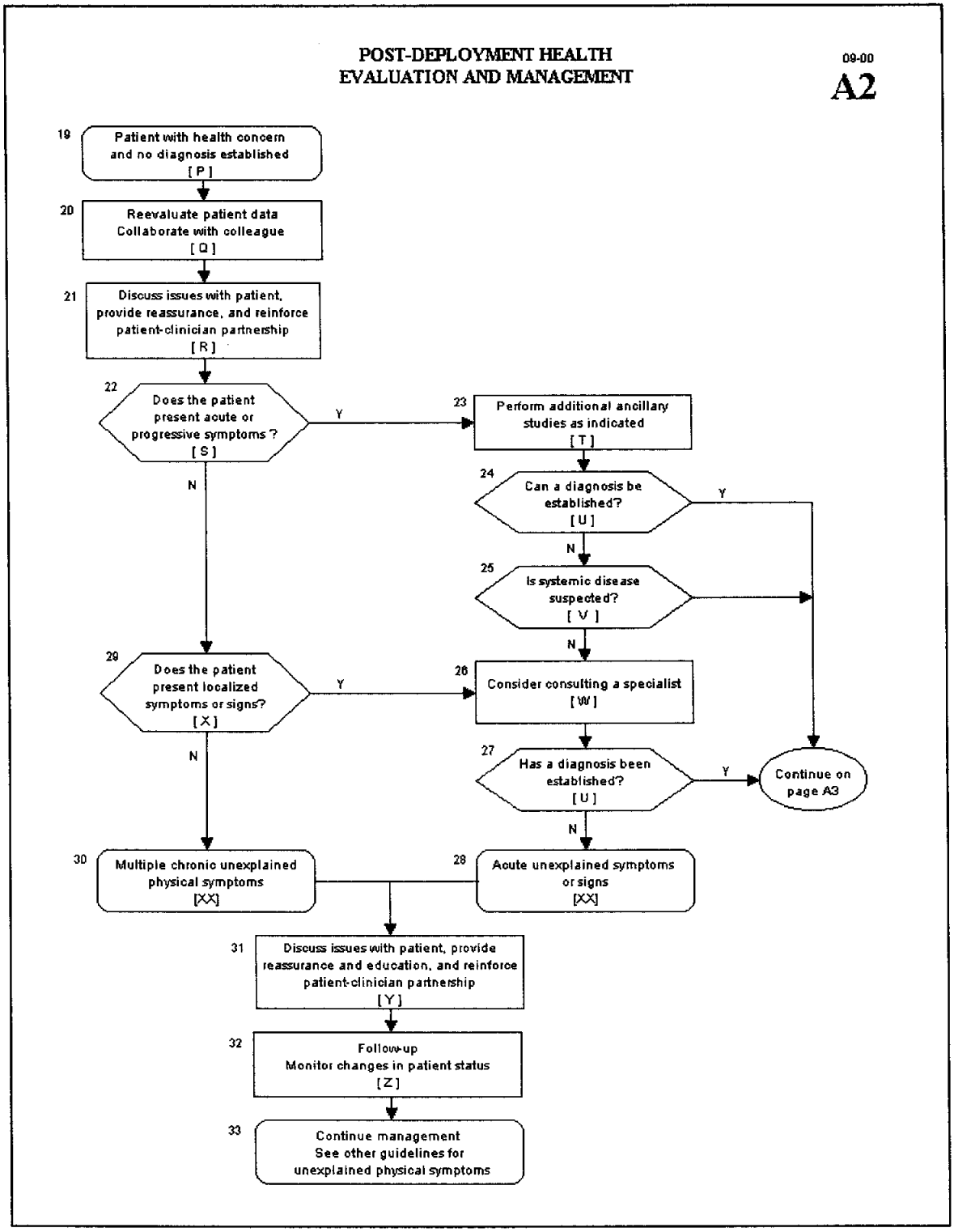
CLINICAL PRACTICE GUIDELINE FOR POST-DEPLOYMENT HEALTH EVALUATION AND MANAGEMENT

ALGORITHM AND ANNOTATIONS

DRAFT VERSION 1.0

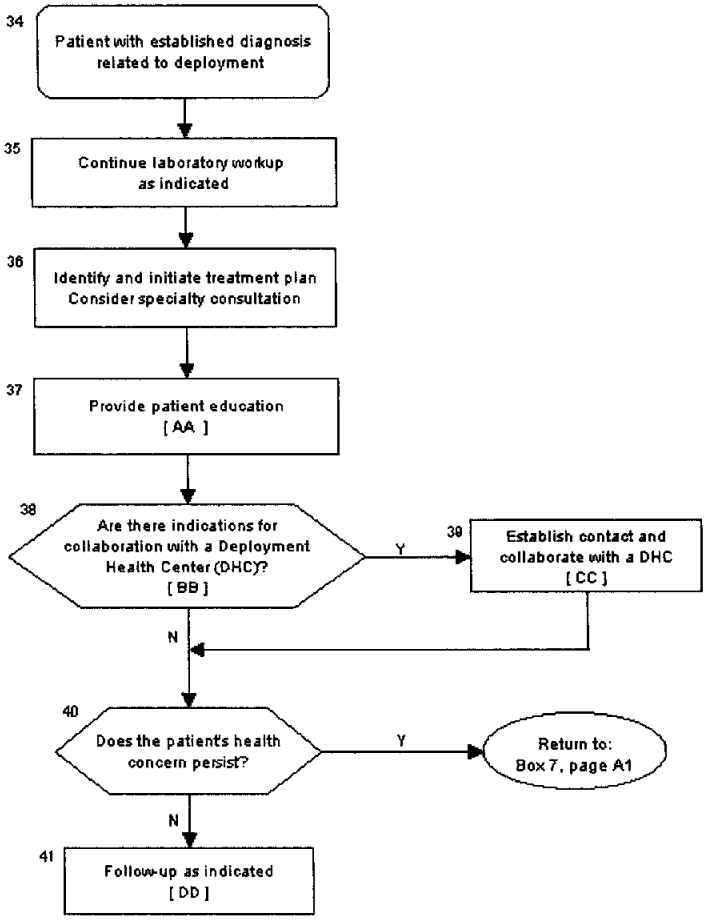

POST-DEPLOYMENT HEALTH
EVALUATION AND MANAGEMENT
09-00
A1
1
DoD/VHA health care beneficiary with health concern
[A]
2
Ascertain chief complaint /concern
Obtain brief history on current illness
Review history of deployment
Address acute health problems
[B]
3
Has the patient been deployed?
[C]
Y
4
Reinforce partnership with the patient addressing deployment concern(s)
[D]
N
5
Research deployment issues
[E]
6
Is the patient's problem/concern deployment related?
[F]
Y
N
7
Identify / update deployment related problem from the medical record, history, physical exam, laboratory tests, and psychosocial assessment
[G]
8
Does the patient present signs or symptoms?
[H]
Y
9
Does the patient present a recognized illness or injury?
[I]
Y
N
N
13
Asymptomatic patient with health concern
[K]
12
No diagnosis established
10
Obtain ancillary studies as indicated
[J]
14
Provide reassurance and patient health education
[L]
11
Can a diagnosis be reached?
Y
15
Does the patient's concern persist?
[M]
Y
N
N
18
Reevaluate
Consider consultation
[N]
16
Continue medical management in primary care
17
Follow-up as indicated
[O]
Continue on page A2
Continue on page A3


POST-DEPLOYMENT HEALTH
EVALUATION AND MANAGEMENT
09-00
A2
19
Patient with health concern and no diagnosis established [P]
20
Reevaluate patient data Collaborate with colleague [Q]
21
Discuss issues with patient, provide reassurance, and reinforce patient-clinician partnership [R]
22
Does the patient present acute or progressive symptoms ? [S]
Y
23
Perform additional ancillary studies as indicated [T]
24
Can a diagnosis be established? [U]
Y
N
25
Is systemic disease suspected? [V]
N
29
Does the patient present localized symptoms or signs? [X]
Y
26
Consider consulting a specialist [W]
N
27
Has a diagnosis been established? [U]
Y
Continue on page A3
N
30
Multiple chronic unexplained physical symptoms [XX]
28
Acute unexplained symptoms or signs [XX]
31
Discuss issues with patient, provide reassurance and education, and reinforce patient-clinician partnership [Y]
32
Follow-up Monitor changes in patient status [Z]
33
Continue management See other guidelines for unexplained physical symptoms

POST-DEPLOYMENT HEALTH EVALUATION AND MANAGEMENT

A3

09-00



A. DoD/VHA Health Care Beneficiary with Health Concern

DEFINITION

A Department of Defense (DoD) or Veterans Health Administration (VHA) health care beneficiary presenting to a primary care clinician for the evaluation and management of a post-deployment health concern.

ANNOTATION

"The nation has a commitment to protect and care for, to the maximum extent possible, the health of military personnel, veterans, and their families. This responsibility is minimizing adverse health effects of military service — both those experienced during the years of military service and those that first appear years after the period of military service" (Presidential Review Directive 5, 1998).

Symptoms and health concerns after a deployment are often indistinguishable from those reported in routine primary health care settings. However, deployment also presents unique and often difficult challenges for military members, veterans, and their families. The military members may experience physical or psychological trauma resulting from a variety of factors, such as combat, environmental extremes, illness or infectious disease, injury, weapons of mass destruction, and toxic environmental threats (IOM, 1999). Female military members may undergo additional health concerns during deployment, including decreased privacy and hygiene, urinary tract and fungal infections, unplanned pregnancy, and sexual assault that may impact their reproductive future post-deployment (Williams, 2000).

Deployment may create or exacerbate existing family problems and strain already fragile family relationships and coping mechanisms. Family members may experience heightened personal and interpersonal stress as a result of sudden changes within the family unit—both the military member's separation and return. The heightened stress may adversely affect the physical and mental health of each family member and may also lead to domestic violence (IOM, 1999).

DISCUSSION

DoD and VHA health care beneficiary identification and eligibility requirements are specified in the following documents:

- United States Code, Title 10, Part II, Chapter 55, Section 1072, 1074, 1076
- United States Code, Title 38, Part II, Chapter 17, Section 1710–1713
- Public Law 102-405, Title I. *Veterans Health Care Amendment Act of 1992*
- Public Law 102-585, Title VII. *Persian Gulf War Veterans Health Status Act*

REFERENCES

1. Institute of Medicine, Division of Health Promotion and Disease Prevention. *Committee on a National Center on War-Related Illnesses and Post-Deployment Health Issues.* Washington, DC: National Academy Press. 1999.
2. National Science and Technology Council, Presidential Review Directive 5, Executive Office of the President, Office of Science and Technology Policy. *A National Obligation: Planning for Health Preparedness for and Readjustment of the Military, Veterans, and Their Families After Future Deployments*. August 1998.
3. Title 10 United States Code, Armed Forces. Chapter 55. *Medical and Dental Care.*
4. Title 38 United States Code, Veterans Benefits, Chapter 17. *Hospital, Nursing Home, Domiciliary, and Medical Care.*

5. Williams, R. "Deploying Women's Health Critical to Mission Success in Peace and War. Excepts from Dr. Sue Bailey's Lecture on Women's Health Issues at the Women in Military Service for America Memorial." *American Forces Press Service.* March 8, 2000.

B. Ascertain Chief Complaint/Concern, Obtain Brief History on Current Illness, Review History of Deployment, and Address Acute Health Problems

OBJECTIVE

Establish the reason for the patient's visit and obtain a history of prior deployment(s).

ANNOTATION

The clinician should obtain and review the deployment history with the patient to surface potential links to the chief complaint or concern. The patient's beliefs, expectations, and personal circumstances are significant and may play a strong role in the management of their health care.

Unstable health problems should be addressed immediately before continuing with the *Clinical Practice Guideline For Post-Deployment Health Evaluation and Management.*

C. Has the Patient Been Deployed?

OBJECTIVE

Identify patients who have a history of deployment.

ANNOTATION

Deployment is defined as any current or past event or activity that relates to duty in the armed forces that involves an operation, location, command, or duty that is different from the military member's normal duty assignment (DoD, JP 1-02, 1994). Military members meet deployment criteria anytime they leave the physical locale of the parent command and enter an environment for operational deployment or are stationed in a hostile territory.

The number of military members deployed in any specific operation can vary from one to hundreds of thousands. A deployment may last anywhere from a few days to six months or longer. Military members may deploy to a well-supported U.S. or foreign military base in a developed country, a field setting in an urban or rural part of a developing country, or on a ship visiting foreign ports (DoD Directive 6409.2, 1997 and DoD Instruction 6490.3, 1997).

The *Clinical Practice Guideline For Post-Deployment Health Evaluation and Management* also applies to individuals who were not deployed, but have health concerns relating to a deployment; e.g., family members of recently deployed personnel.

DISCUSSION

DoD criteria for deployment includes all activities from origin or home station through destination, specifically including intra-continental U.S., inter-theater and intra-theater movement legs, staging, and holding areas. DoD officially defines deployment as follows:

- The change from a cruising approach or contact disposition to a disposition for battle (Navy)
- The movement of forces within areas of operation

- The positioning of forces into a formation for battle
- The relocation of forces and materiel to desired areas of operations

Deployment missions vary and may include:

- Military liaison and training support
- Joint and coalition force exercises
- Construction projects
- Humanitarian assistance, including health care
- Refuge relief
- Peacekeeping
- Peacemaking
- Low-intensity conflict (LIC)
- War
- Any combination of the above and other missions

Within the U.S., military members may deploy to conduct the following operations:

- Fight forest fires
- Provide disaster relief
- Assist against terrorist actions
- Maintain civil order
- Support drug interdiction and border patrol operations

The military member may also deploy as part of an official Joint Staff deployment, which is defined as, "a troop movement resulting from a [Joint Chiefs of Staff] unified command deployment order for 30 continuous days or greater to a land-based location outside the U.S. that does not have a permanent U.S. military medical treatment facility" (DoD, Joint Staff Memorandum, 1998).

REFERENCES

1. Department of Defense Directive 6490.2. *Joint Medical Surveillance.* August 30, 1997.
2. Department of Defense Instruction 6490.3. *Implementation and Application of Joint Medical Surveillance for Deployments.* August 7, 1997.
3. Department of Defense Joint Publication 1-02. *Dictionary of Military and Associated Terms.* 1994.
4. Department of Defense, Joint Staff Memorandum. *Deployment Health Surveillance and Readiness,* December 4, 1998.

D. Reinforce Partnership with the Patient Addressing Deployment Concern(s)

OBJECTIVE

Promote patient trust at the earliest opportunity.

ANNOTATION

Recent experience has shown that individuals concerned about health after deployment may be especially inclined to distrust the Government, making it particularly important for clinicians to establish individual rapport and foster open communication with patients.

Post-deployment health communication typically involves high concern issues. Surveys, case studies, and focus groups indicate that trust and credibility are not quickly or easily established. Rather, they are the result of building and maintaining partnerships.

To establish a partnership with the patient, the clinician should:

- Acknowledge the patient's concerns and symptoms
- Indicate commitment to understand the patient's concern and symptoms
- Encourage open and honest transfer of information that will provide a more comprehensive picture of patient's concerns and medical history
- Indicate commitment to allocate sufficient time and resources to resolving the patient's concerns
- Avoid open skepticism or disapproving comments in discussing the patient's concerns

At each patient visit the clinician should consider the following:

- Ask if there are unaddressed or unresolved concerns.
- Summarize and explain all test results.
- Schedule follow-up visits in a timely manner.
- Explain that outstanding or interim test results and consultations will be reviewed during the follow-up visits.
- Offer to include the concerned family member or significant other in the follow-up visit.

REFERENCES

1. Emanuel, E.J. and Emanuel, L.L. "Four Models of the Physician-Patient Relationship." *Journal of the American Medical Association.* 1992. 267 (16): 221-6.
2. Lipkin M., Quill T.E., and Napodano, R.J. "The Medical Interview: A Core Curriculum for Residencies in Internal Medicine." *Annals of Internal Medicine.* 1984. 100: 277.
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5. Stuart, M.R. and Lieberman, J.A. *The Fifteen-Minute Hour: Applied Psychotherapy for the Primary Care Physician,* Second Edition. Westport, Connecticut: Praeger Paperback. 1993.
6. Wiedemann, P.M. and Schutz, H. *Risk Communication for Environmental Health Hazards.* Zbl. Hyg. Umweltmed. 1998/1999. 202: 345-59.

E. Research Deployment Issues

OBJECTIVE

Enhance the clinician's knowledge regarding deployment health issues.

ANNOTATION

Often when evaluating patients with deployment related health concerns, the patient initially knows more about deployment specific exposure than the clinicians. Before proceeding further, the clinician should obtain a clear understanding of the possible risk factors and range of agents the patient may have been exposed to. The clinician should thoroughly research the patient's deployment related health concerns and identify known risks and exposures for a particular deployment. A follow-up appointment provides the clinician with time to research relevant information before discussing it with the patient.

A vast amount of this information is available at various governmental and non-governmental sources. The Deployment Health Resource Web site will provide links to these sources and other information about potential exposures, immunizations, endemic diseases, and other related information. This site will include information from civilian publications and provide links to other data sources that could provide additional information to the clinician and patient.

APPENDIX (*To be developed*: Deployment Health Resource Web site)

F. Is the Patient's Problem/Concern Deployment Related?

OBJECTIVE

Determine whether a patient's problem or concern is related to a deployment.

ANNOTATION

After patient evaluation, relevant deployment research, and known risk and exposure identification, the clinician needs to determine if the patient's concern or problem is deployment-related. The determination should be made in light of the patient's entire medical and deployment history. In some cases, it could be premature to determine that the health concern or problem is deployment-related. If a definitive determination cannot be made and *either* the patient or the clinician continues to suspect that the concern or problem is deployment-related, the clinician should continue with the next steps in the *Clinical Practice Guideline For Post-Deployment Health Evaluation and Management* (Delbanco 1992 and Engel 1999).

REFERENCES

1. Delbanco, T.L. "Enriching the Doctor-Patient Relationship by Inviting the Patient's Perspective." *Annals of Internal Medicine.* 1992. 116 (5): 414-8.
2. Engel, C.C. and Katon, W.J. "Population and Need-Based Prevention of Unexplained Symptoms in the Community." *Institute of Medicine, Strategies to Protect the Health of Deployed U.S. Forces: Medical Surveillance, Record Keeping, and Risk Reduction.* Washington, DC: National Academy Press. 1999. 173-212.
3. Institute of Medicine, Medical Follow-Up Agency. *Strategies to Protect the Health of Deployed U.S. Forces: Medical Surveillance, Record Keeping, and Risk Reduction.* Washington, DC. National Academy Press. 1999.

G. Identify/Update Deployment Related Problem From the Medical Record, History, Physical Exam, Laboratory Tests, and Psychosocial Assessment

OBJECTIVE

Obtain comprehensive patient data in order to reach a working diagnosis.

ANNOTATION

Some military members are dissatisfied with how clinicians respond to deployment related health concerns. The clinician can validate the patient's deployment related health concerns and communicate care and understanding by completing a thorough and early review of the following:

- All Medical Records
- Medical History and Psychosocial Assessment
- Review of Systems

- Physical and Mental Status Exam
- Routine Test Results
- Standard Health Assessments

DISCUSSION

The *Medical Record review* should include the following:

- Complete medical history
- Family and social history
- Occupational and deployment history, including possible risks, hazards, and exposures to toxic agents
- Prescription history, including over-the-counter medications and herbs
- Pre- and post-deployment physical examinations, including immunizations and other prophylactic measures
- Clinical notes
- Emergency room evaluations
- Other routine history and physical examinations
- Radiological, laboratory, and other ancillary test results

In addition to routine medical history and review of systems the following should be assessed:

- Occupational and deployment history, including possible risks, hazards, and exposures to toxic agents
- Combat exposure, including excessively violent or brutal treatment of civilians or prisoners
- Travel history pre-, during, and post-deployment, including immunizations and other prophylactic measures
- Reproductive history including:
  —Infertility or sexual dysfunction among males and females
  —Menstrual history, miscarriages, stillbirths, and congenital malformations among females
- Prescription history, including over-the-counter medications and herbs
- Tobacco, alcohol, and illicit drug use
- Job stability and stress
- Physical and emotional abuse or sexual harassment and assault
- Current support structure, including marital status, family, and friends
- Family, developmental, and psychosocial history
- Sleep habits

Routine Post-Deployment Laboratory Testing may include the following:

- Complete Blood Count (CBC)
- Basic chemistries, including electrolytes, blood urea nitrogen (BUN), creatinine, glucose, and liver function tests
- Urinalysis
- Tuberculin Skin Test (PPD), if not completed within the past 6 months

Standard Health Assessment could include the following:

- Medical and exposure history assessment
- Patient Health Questionnaire (PHQ), a screening tool for depression, somatization, panic disorder, anxiety, alcohol abuse or dependency, binge eating disorder, and bulimia nervosa (see Appendix C).

- Post Traumatic Stress Disorder (PTSD) CheckList (PCL), a screening tool specifically designed to assess trauma-related distress that can be self-administered in a brief time period (see Appendix C)

REFERENCES

1. Blanchard, E.B., Jones-Alexander, J., Buckley, T.C., and Forneris, C.A. "Psychometric Properties of the PTSD Checklist (PCL)." *Behavior Research Therapy.* 1996. 34(8): 669-73.
2. Peterson, M.C., Holbrook, J.H., Hales, D.V., et al. "Contributions of the History, Physical Examination, and Laboratory Investigation in Making Medical Diagnoses." *Western Journal of Medicine.* 1992.
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4. Spitzer, R., Kroenke, K., Williams, J., and the Patient Health Questionnaire Primary Care Study Group. "Validation and Utility of a Self-Report Version of PRIME-MD. The PHQ Primary Care Study." *Journal of the American Medical Association.* 1999. 282: 1737-44.

H. Does the Patient Present Signs or Symptoms?

OBJECTIVE

Identify a patient who has an injury or illness.

ANNOTATION

Often after deployment, patients may be reluctant to share signs and symptoms they are experiencing because of occupational and other concerns, including fear of losing their job. Patients may express their concerns as a request or offer additional complaints during the examination that may clarify the true reason for the visit. In other cases, the patient without symptoms may want to discuss deployment related health concerns. It is important to remember that *either* the patient's report of symptoms or the observation of a sign can determine the presence of an illness or injury.

Clinicians should be aware of the fact that our understanding of health outcomes after deployment is limited. Some symptoms may not be obvious or may not have manifested yet.

- Signs are defined as objective physical findings.
- Symptoms are defined as subjective complaints.
- The presence of *either* signs or symptoms warrants further investigation and can suggest the presence of an illness or injury.
- The absence of both signs and symptoms indicates a need to proceed with patient education and reassurance.
- Unusual or emerging illnesses might present as previously unrecognized constellations of symptoms and signs.

DISCUSSION

The clinician needs to understand the type and extent of the patient's health concerns before he or she can adequately address them. However, some patients may be unwilling or unable to verbalize concerns to the clinician because of fear of receiving an unfavorable reaction or unreliable response. In such cases, the clinician may place an increased emphasis on nonverbal sensitivity.

Nonverbal sensitivity requires that the clinician pay special attention to nonverbal cues that denote the patient's true feelings. These cues could include posture, eye contact, facial expressions, and indirect language. Addressing nonverbal cues is valuable to ultimately understanding and communicating with the patient. It is important to note that 50 percent of patients' care time is spent on problems that are primarily psychological (Korsch and Negrete, 1972).

I. Does the Patient Present a Recognized Illness or Injury?

OBJECTIVE

Determine if the patient has a recognizable medical condition.

ANNOTATION

After determining that the patient is presenting signs or symptoms, the clinician needs to formulate a working diagnosis. Additional studies or the patient's response to treatment will confirm the working diagnosis. In some cases, the clinician will be unable to formulate a diagnosis, in which case it is important to ensure that the following activities were completed and reviewed:

- A complete and thorough medical record review
- A thorough deployment history (see Annotation B)
- A review of the health risk associated with the deployment (see Annotation 5)
- A complete history and physical examination (see Annotation G)
- All basic laboratory studies and tests (see Annotation G)
- A standard health assessment (e.g., Patient Health Questionnaire™ (PHQ) and PTSD CheckList (PCL-C))

It is highly recommended that two or more patient visits be completed before concluding the patient does not have a recognizable illness or injury.

J. Obtain Ancillary Studies as Indicated

OBJECTIVE

Further evaluate and confirm the working diagnosis.

ANNOTATION

Selected ancillary studies should be performed based on clues derived from the history and physical examination. The clinician should avoid performing ancillary studies purely for the basis of screening as these tests may have very low specificity, may result in false positive results, and may cause unrealistic expectations on behalf of the patient.

K. Asymptomatic Patient with Health Concern

DEFINITION

A patient who expresses a health concern, yet does not exhibit any recognizable illness or injury, is categorized as "asymptomatic with health concern." These concerns may be expressed in the form of questions about illness, exposure, or recent media coverage. The clinician should continue to nurture the patient-clinician partnership, elicit the patient's trust, and address the patient's health concerns.

A non-deployed family member may express a health concern that is frequently related to reproduction or the possibility of a contagious illness. In addition, he or she may seek information and reassurance regarding changes or symptoms they have observed in a deployed spouse.

L. Provide Reassurance and Patient Health Education

OBJECTIVE

Validate the patient's thoughts, feelings, and attitudes, reassure the patient, and reinforce the patient-clinician partnership.

ANNOTATION

Risk Communication:

Risk Communication involves the exchange of information among interested parties about the nature, magnitude, significance, or control of a risk. Clinicians are continually asked to provide information about health, safety, and environmental risks to interested individuals, families, and communities. Risk assessment provides a strong foundation for the understanding of a risk and can be an important perspective for clinicians. Risk communication is a crucial component of the care, treatment, and support for the patient, patient's family, or significant others.

In order to maintain the patient-clinician partnership, it is necessary to address and discuss the patient's concerns throughout the evaluation processes. This communication involves a two-way dialogue between the patient and clinician and is especially critical when a diagnosis has not yet been established. The effectiveness of communications involving a highly personal concern, such as the patient's personal health, is primarily determined by the patient's perception of how trusted and credible the clinician is.

There are four factors that influence perceptions of trust and credibility for discussions of high concern issues (Kolluru, 1996):

- Caring and empathy
- Competence and expertise
- Dedication and commitment
- Honesty and openness

Patient Education:

Patient education is one of the most important responsibilities of the clinician. It is facilitated by attention to the patient's expectations, beliefs, and decisions.

Patients bring a set of beliefs about themselves and the meaning of their symptoms and environmental exposures into encounters with their clinician. Patient expectations of illness and the consequences of exposures may differ significantly from scientific models. The goals of the clinician should include attempting to understand the patient's beliefs, informing the patient about pertinent scientific information, and establishing a collaborative and negotiated understanding upon which further communication and work can be based. Some types of patient education may be more effectively provided by other members of the health care team or in a group setting.

DISCUSSION

Several studies emphasize the importance of trust and credibility in the formation of perceptions during health communication. Specific behaviors have been shown to influence the patient's satisfaction with communication. The amount of warmth and friendliness shown by the clinician is positively related to patient satisfaction (Hulka, et al., 1975). Furthermore, a study conducted by Street and Wiemann (1987) determined that health care satisfaction was positively associated with the patient's perception of the degree of interpersonal involvement and expressiveness of the clinician, and was negatively associated with the patient's perceived communicative dominance by the clinician.

Health communication is effective when the clinician's actions and communications (both verbal and nonverbal) convey the factors listed below:

- Caring and empathy, including perceived sincerity, ability to listen, and ability to see issues from the perspective of others
- Competence and expertise, including perceived intelligence, training, experience, education level, professional attainment, knowledge, and command of information
- Dedication and commitment, including perceived altruism, diligence, self-identification, involvement, and hard work
- Honesty and openness, including perceived truthfulness, candidness, fairness, objectivity, and sincerity

Of the four factors, patient perceptions of caring and empathy are the most important. Research has shown that it can account for 50 percent or more of an individual's trustworthiness and credibility. In 1984, Beckman and Frankel cited findings indicating that specific communication behaviors, such as listening and not interrupting, may lead to patient satisfaction. Hulka, et al. (1975) found that patient satisfaction with health communication is influenced by the clinician's awareness of the patient's concerns.

Patient perceptions of competence and expertise also help determine the clinician's level of trust and credibility. Competence and expertise are the easiest factors to establish because clinicians are automatically perceived by the public to be credible sources of information. A minimal amount of time needs to be spent establishing competence and expertise.

Perceptions of honesty and openness result from both nonverbal cues and words that convey truthfulness, objectivity, and sincerity. Nonverbal cues, such as eye contact and facial expressions, often make more of an impression on the patient than do verbal messages. A patient often perceives the use of medical jargon as a way to mask the truth. Although reliance on medical language may be necessary to communicate some ideas, some patients may not understand or comprehend what the clinician is trying to convey (Samora, Saunders, and Larson, 1961). Simply put, the clinician must speak the patient's language because some patients are unable to speak or understand the clinician's language.

Perceptions of dedication and commitment are influenced by perceptions of the clinician's hard work in pursuit of health goals. It is vital to the communication process that the clinician reinforces the truth and credibility factors throughout every discussion with the patient. Otherwise, miscommunication and misperception may impede the communication process, which could negatively impact the patient's treatment or prevent the patient from seeking treatment in the future.

REFERENCES

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2. Kolluru, R., Bartell, S., Pitblado, R., and Stricoff, S. "Communicating Risk in Crisis and Non-Crisis Situations." *Risk Management Handbook for Environmental, Health, and Safety Professionals*, Part VI. 1996. **QE=II-2B, SR=A.**
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6. Street and Wiemann. "Patient Satisfaction with Physicians' Interpersonal Involvement, Expressiveness, and Dominance." *Communication Yearbook 10*. Beverly Hills, California: M. L. McLaughlin. 1987. 519-612.
7. Wiedemann, P.M. and Schutz, H. *Risk Communication for Environmental Health Hazards*. Zbl. Hyg. Umweltmed. 1998/1999. 202: 345-59.

M. Does the Patient's Concern Persist?

OBJECTIVE

Identify an asymptomatic patient who continues to have a health concern.

ANNOTATION

A second direct patient contact should be made within two to four weeks of the initial visit to allow for re-evaluation and to arrange continued contact and access to care, if necessary. Contact should be made by telephone or in person, if possible.

DISCUSSION

After identifying the type and extent of the patient's health concern and providing reassurance and education, the clinician must determine whether the patient's health concern still exists. This is necessary to determine the next step in the patient's treatment.

If the health concern does not persist, the clinician needs to reiterate that time is available for additional discussions regarding current or future concerns. This practice reinforces the trust and credibility factors of empathy and caring, honesty and openness, and dedication and commitment. This practice also allows the patient time to digest the information provided during the appointment. Upon further consideration, the patient might think of additional questions or need clarification of specific issues. The clinician should ensure that the patient knows how to contact them through e-mail, telephone, or by scheduling an appointment.

REFERENCES

1. Adams, J. "The General Approach to the Difficult Patient." *Emergency Medicine Clinic of North America*. 1998. 16 (4): 689-700.
2. Clements, W.M., Haddy, R., and Backstrom, D. "Managing the Difficult Patient." *Journal of Family Practice*. June 1980. 10 (6): 1079-83.
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N. Reevaluate/Consider Consultation

OBJECTIVE

Resolve the patient's health concern.

ANNOTATION

If the patient's health concern persists despite reassurance and education, the clinician should re-evaluate the patient's medical data to assure that a diagnosis has not been missed and assess the patient's status for the next course of action. The clinician should provide the patient with additional reassurance and educational material, if indicated, keeping in mind that patient dissatisfaction is often related to communication variables. To increase patient satisfaction the clinician should provide detailed explanations to the patient using less medical jargon.

The clinician should consider discussing the patient's medical data with another clinician or consulting with or referring to a specialist. The consulted specialist may be able to interact and communicate more effectively with the patient regarding this type of health concern or may have experience in communicating with patients who exhibit similar health concerns.

Consultation sources, when clinically appropriate, include but are not limited to:

- Social Services
- Family Advocacy Program
- Preventive Medicine/Public Health
- Bioenvironmental Engineering/Environmental Sciences/Industrial Hygiene
- Reproductive Toxicology
- Genetic Counseling
- Health Promotions
- Medical Specialty Consultations
  —Infectious Disease
  —Psychiatry/Psychology
  —Pulmonary
  —Cardiology
  —Internal Medicine
  —Allergy/Immunology
  —Women's Clinic – OB/GYN
- Health Information/Education Sources
- Spiritual Counseling

O. Follow-Up as Indicated

OBJECTIVE

Assure that the patient's health concerns have been addressed.

ANNOTATION

It is important that the clinician provide the patient with the opportunity to digest the information provided during the appointment and to discuss concerns with friends and family. The patient may think of additional questions or need clarification of specific issues. The clinician should provide a means for the patient to contact them directly (e.g., e-mail, voice mail, or pager). To reinforce the trust and credibility factors of empathy and caring, honesty and openness, and dedication and commitment, the clinician should reaffirm with the patient the availability of future appointments to discuss current or future concerns.

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P. Patient with Health Concern and No Diagnosis Established

DEFINITION

A patient with no established diagnosis will fall into one of four categories:

- Well-recognized diseases not yet manifesting common signs and symptoms
- Emerging diseases—Objective finding with as yet unknown etiology based on current scientific knowledge (e.g. HIV in 1982)
- Medically unexplained physical symptoms—Symptoms without isolated objective findings and clinically identifiable pathophysiology
- Isolated objective findings—Physical signs or laboratory abnormalities without symptoms

Note: Patients may also end up in this category because of clinician or laboratory error (e.g., false positive or negative results or misinterpretation of positive or negative results).

DISCUSSION

One of the main obstacles to understanding medically unexplained symptoms is the confusing terminology sometimes applied to them. For clarity, the Guideline adopts a consistent terminology. "Unexplained symptoms" or "medically unexplained symptoms" are the terms used to describe physical symptoms that provoke care-seeking, but have no clinically determined pathogenesis after an appropriately thorough diagnostic evaluation (Engel and Katon, 1999). Clinicians, scientists, symptomatic individuals, the media, employers, and other groups frequently apply labels to unexplained symptoms for different purposes. These labels may communicate an implied pathogenesis, such as chronic fatigue syndrome (infectious), certain low-level chemical sensitivities (allergic), somatoform disorders (psychiatric), and fibromyalgia (rheumatologic). The Guideline will rely on the more generic "medically unexplained symptoms" or "unexplained symptoms" to describe diagnoses or conditions characterized by symptoms, rather than objective clinical evidence (i.e., signs found on examination or laboratory findings) of an underlying pathophysiological process.

Recently, the Centers for Disease Control (CDC) defined "chronic multisymptom illness" and applied the definition to study the relationship of the Gulf War to subsequent illness. The chronic multisymptom illness definition has the advantage of encompassing several common syndromes that are comprised of unexplained symptoms (Fukuda and Nisenbaum, 1998). The chronic multisymptom illness definition, developed using factor analysis and clinician assessments, is the presence of two or more of the following symptoms: musculoskeletal pain in more than one body region, debilitating fatigue, and cognitive or mood impairment. Frequently associated symptoms such as digestive, respiratory, and nervous system symptoms were not included in the CDC definition.

Unexplained symptoms occurring in the general population include fibromyalgia, chronic fatigue syndrome, hysteria, somatization disorder, conversion disorder, multiple chemical sensitivities, and other names (Buchwald and Garrity, 1994; Clauw, 1995; Clauw and Chrousos, 1997; Kipen and Fiedler, 1999; Barsky and Borus, 1999; and Wessely, Nimnuan, et al., 1999). Patients with chronic fatigue syndrome, fibromyalgia, and temporomandibular disorder may also experience overlapping conditions.

'Disease' and 'illness' are terms sometimes used in the Guideline. When properly used, these terms are not interchangeable (Jennings, 1986). A disease is a pathophysiological process that is identified via objective findings (i.e., signs found on clinical examination or laboratory evidence) (Mayou and Sharpe, 1995; Susser, 1990) . In contrast, illness is a subjective lack of wellness that is identified via the complaints and behaviors of the affected person. Illnesses encompass the complete range of physical and mental symptoms and the suffering that is experienced with them (Mayou and Sharpe, 1995; Jennings, 1986; and Susser, 1990). Symptoms and suffering are unusual in some diseases. For example, individuals with essential hypertension seldom perceive their disease until late in its natural history. Similarly, many illnesses involve severe disabling symptoms that are the source of undeniable suffering, even though objective clinical evidence of disease is lacking. Unexplained symptoms may be thought of as illness in the absence of known disease. Unexplained symptoms may also be present if a disease is of insufficient severity to explain the full extent of the associated symptoms.

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Q. Reevaluate Patient Data and Collaborate with Colleague

OBJECTIVE

Reassess the progress of the patient's workup and the probability of identifying a diagnosis based on currently available data.

ANNOTATION

Input from colleagues with varying expertise may provide the clinician with a fresh viewpoint regarding the patient's concerns (See also Annotation I).

Note: Patients may end up in this category because of clinical or laboratory error (e.g., false negative or false positive results or misinterpretation of positive or negative results).

R. Discuss Issues with Patient, Provide Reassurance, and Reinforce Patient-Clinician Partnership

OBJECTIVE

Validate the patient's thoughts, feelings and attitudes, reassure the patient, and reinforce the patient-clinician partnership.

ANNOTATION

At this point in the workup, the patient is likely to be intensely concerned and potentially mistrustful because the clinician has not identified a cause or explanation for their concerns.

Risk Communication:

In order to maintain the collaborative clinician-patient partnership, it is necessary to address and discuss patient and family concerns throughout the evaluation process. This communication involves an open two-way dialogue between patient and clinician. This is especially important when the diagnosis remains in doubt or when the clinician and the patient disagree about the diagnosis. Under these circumstances, patient concerns escalate and increase any preexisting mistrust of the clinician. The effectiveness of communication regarding highly personal concerns, such as a health concern, is primarily determined by the patient's assessment as to how credible and trustworthy the clinician is.

There are four factors that will most influence patient perceptions of clinician trustworthiness and credibility in the presence of a persistent unresolved health concern (Kolluru, 1996). These are the patient's assessment of the clinician's (for further discussion see Annotation L):

- Caring and empathy
- Competence and expertise
- Dedication and commitment
- Honesty and openness

An additional factor to consider under the circumstances of a post-deployment evaluation is external information that the patient and his or her family may be reading or seeing. For example, if after the deployment in question there are popular theories about illnesses that have received media attention, this may reduce the credibility of the Federally-employed clinician, especially when symptoms are undiagnosed after an extended evaluation (Engel & Katon 1999; Engel 1999).

Under these difficult circumstances, the clinician should:

- Maintain open communication with the patient
- Take the time needed to explain the available findings and acknowledge clinical uncertainty where it exists
- Convey a sense of optimism regarding diagnosis, treatment, and prognosis
- Continue to follow the patient's progress, since discontinuing contact or referring without a return visit is likely to leave the patient feeling rejected, angry, and mistrustful
- Always make good on his or her word (e.g., if one promises to talk with an expert, then do it and tell the patient about it later)
- Involve the patient's family or significant others (sometimes the family is more concerned regarding the patient's health than the patient is) unless the patient refuses family involvement

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S. Does the Patient Present Acute or Progressive Symptoms?

OBJECTIVE

Identify the patient who has an acute, subacute, or progressive illness.

DEFINITIONS

Definitions for acute or progressive symptoms in the context of the Guideline are as follows:

- Acute—Manifestations of illness of less than 3 months duration
- Subacute—Manifestations of illness of 3 to 6 months in duration
- Chronic—Manifestations of illness that are longer than 6 months in duration
- Progressive—Clinically appreciable deterioration during a 3 to 6 month period

ANNOTATION

Acute or progressive symptoms are more likely to represent a diagnosable disease than are symptoms of remote onset or chronic, intermittently relapsing nature. When the diagnosis is not apparent after the initial primary care evaluation, the clinician should take an aggressive approach to diagnostic testing in order to diagnose and treat an acute or progressive illness in a timely manner.

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T. Perform Additional Ancillary Studies as Indicated

OBJECTIVE

Provide objective findings that will result in a diagnosis.

ANNOTATION

When the patient presents with acute or focused signs and symptoms, the clinician should perform additional ancillary studies necessary to obtain a diagnosis. Symptoms of sudden onset or progressive course are more likely to have a diagnosable disease or structural abnormality than are symptoms of remote onset and/or chronic, intermittently relapsing course. The opportunity for timely intervention in the setting of acute or progressive illness dictates an aggressive approach to diagnostic testing, even when the diagnosis is not apparent after the initial primary care evaluation.

DISCUSSION

Additional workups may include, but are not limited to, the following:

- The erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) represent acute phase reactants and may be used in distinguishing inflammatory and non-inflammatory disorders. Although they are nonspecific, they may be diagnostically or therapeutically useful.

- Antinuclear antibodies (ANAs) react with various components of the cell nucleus as well as cytoplasm and cell membrane structures. Positive results are characteristic of systemic lupus erythematosus and related disorders. However, ANAs may be found in normal patients or those with a variety of conditions. The clinical significance of the ANA test often parallels the strength of the titer reported, but these tests are not specific. ANA testing should not be used to screen patients with joint pain or presumed systemic illness.

- Creatine phosphokinase (CPK) is an intracellular enzyme found in high concentrations in skeletal muscle, myocardium, and brain. Damage to these tissues results in elevated serum levels of CPK. CPK may be elevated and useful in the diagnosis and treatment of inflammatory myositis, muscular dystrophy, myocardial disease, hypothyroidism, cocaine use, muscle trauma, intramuscular injections, and rhabdomyolysis.

- Thyroid Stimulating Hormone (TSH) and other endocrine studies may be indicated.

- Electromyography is a diagnostic test used to evaluate patients with suspected muscle disease. It is often performed in conjunction with nerve conduction testing. It is primarily used to distinguish between weakness caused by disorders of muscle, peripheral nerves, or neuromuscular junction disorders. When combined with nerve conduction testing, it is often useful in distinguishing neuropathic from myopathic causes of muscle weakness.

- Venereal Disease Research Laboratories (VDRL) testing may be used to screen for primary or secondary syphilis in asymptomatic individuals to confirm the diagnosis of secondary syphilis in the presence of syphilitic lesions and gauge the efficacy of therapy. The test detects antibodies that bind cardiolipin and historically was of substantial importance as results were positive in patients with syphilis. A biologic false-positive in a non-pregnant patient should be confirmed with a Treponemal Ab Absorption test. Pregnant patients should be treated on the basis of suspicion of syphilis by history, physical examination, or epidemiology.

- Viral Serologic Testing *should only* be performed if test results will influence diagnosis, therapy, or prognosis or will help determine the infectivity of an individual patient.

- Human lymphocyte antigen (HLA) studies *should not* be routinely ordered for evaluation or screening as results are not diagnostic.

- Lyme antibodies *should only* be ordered when individuals are strongly suspected of having Lyme disease. Lyme disease is a clinical diagnosis with laboratory studies helpful for confirmation.

- Rheumatoid factors are not specific for rheumatoid arthritis (RA) but can be seen in a variety of other conditions. Therefore, rheumatoid factor measurement should be *reserved for* individuals with possible RA based on history and physical examination.

- HIV testing with appropriate consent and counseling is indicated for patients with known risk factors or suggestive symptoms.

- Drug screening is indicated in patients with known risk factors or presenting symptoms.

Symptom-specific examinations to consider are listed in Table II:

Table II: Symptom-Specific Examinations

Symptom	Ancillary Studies to Consider
Abdominal Symptoms	Esophagogastroduodenoscopy (EGD) with Biopsy and Aspiration Colonoscopy with Biopsy Abdominal Ultrasound Upper Gastrointestinal (GI) Series Abdominal Computerized Tomography (CT) Scan Gastroenterology Consult Women: Gynecology Consult Acute: Surgical Consult
Chest Pain/Palpitations	Electrocardiogram (ECG) Cardiac Stress Test Holter or Event Monitoring Cardiology Consult Psychiatry Consult (if panic attacks are suspected and consultation is acceptable to the patient)

Cough/Shortness of Breath	Pulmonary Function Test (PFT) with Exercise and Arterial Blood Gas (ABG) Methacholine Challenge if PFTs are normal Bronchoscopy with Lavage and Biopsy Pulmonary Consult
Chronic Fatigue	Polysomnography (PSG) Multiple Sleep Latency Test (MSLT) Sleep specialist consult Psychology or psychiatry consult (*only* if acceptable to the patient)
Diarrhea	Stool (Guaiac, Ova & Parasites, Leukocytes, Culture, Clostridium Difficile, and Volume) EGD with Biopsy and Aspiration Gastroenterology Consult
Headache	Magnetic Resonance Imaging (MRI) Head Lumbar Puncture (Glucose, Protein, Cell Count, VDRL, Oligoclonal Myelin, Basic Protein, and Pressure Reading) Neurology Consult
Memory Problems	MRI Head Lumbar Puncture Neuropsychological Testing Neurology Consult
Muscle Aches, Numbness, or Weakness	Electromyelogram (EMG) Nerve Conduction Velocity (NCV) Neurology Consult Rheumatology Consult Physical Medicine Consult
Reproductive Concerns	Urinalysis (UA) and Culture Cervical Pap Smear and Culture Semen Analysis Urology Consult Gynecology Consult
Skin Rash	Biopsy Dermatology Consult
Vertigo/Tinnitis	Audiogram Electronystagmography (ENG) Brainstem Auditory Evoked Response (BAER) Ears, Nose, and Throat (ENT) Consult Neurology Consult Cardiology Consult (if fainting is involved) Psychiatry Consult (if panic attacks are suspected and the consultation is acceptable to the patient)

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U. Can (Has) a Diagnosis Be (Been) Established?

OBJECTIVE

Identify patients for whom there is a well-defined diagnosis.

ANNOTATION

A diagnosis is a clinically defined injury or disease based on objective and reproducible clinical manifestations of examination, laboratory testing, or medical imaging.

Virtually all patients who see a clinician will receive a label. Biomedicine is firmly predicated on the notion that proper treatment is based upon recognition of the correct disease. However, for syndromes such as multiple chemical sensitivity, chronic fatigue syndrome, fibromyalgia, temporomandibular disorders, fibrositis, interstitial cystitis, irritable bowel syndrome, and chronic pelvic pain, there is ample evidence of diagnostic overlap and limited evidence to support discrete illnesses with distinct pathophysiologies or natural histories. For most of these and other constellations of persistent physical symptoms, comprehensive biomedical evaluation yields few consistent objective findings and does little to guide clinical management or provide insight into associated functional impairment. Typically, these diagnoses are largely descriptive (e.g., retropatellar pain syndrome) or based on hypothesized etiology (e.g., fibromyalgia) rather than a known pathophysiology. Under the Guideline, conditions that are labeled but are not an objectively evident injury or disease are NOT considered a diagnosis because they do not lead to a specific injury or disease based treatment.

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V. Is Systemic Disease Suspected?

OBJECTIVE

Identify patients with potential systemic disease.

ANNOTATION

It is possible for patients with diagnosable diseases to initially present with acute and unfocused or non-localized symptoms. Diagnosis for these maladies is difficult and often delayed. These conditions include but are not limited to connective tissue diseases (e.g., systemic lupus erythematosus and Sjögren's syndrome), neurological diseases (e.g., multiple sclerosis), infectious diseases, and neoplastic diseases.

If the patient's symptoms suggest one of these conditions, the clinician should consider additional diagnostic studies (see Annotation T).

W. Consider Consulting a Specialist

OBJECTIVE

Provide specialized services to individuals who may need and could benefit from them.

ANNOTATION

In the presence of 1) acute or progressive or 2) chronic and localized symptoms that remain undiagnosed to this point in the evaluation, the clinician is urged to consider consulting an appropriate specialist. In most cases, the (primary care) clinician should remain engaged in the care of the patient after the consultation (see Annotation T for a list of problems and corresponding specialty consultants).

X. Does the Patient Present Localized Symptoms or Signs?

OBJECTIVE

Identify patients with regionally-focused symptoms or signs.

DEFINITION

Localized symptoms or signs are those that involve a single organ system (e.g., skin or nervous system) or a single body area (e.g., knee, head, or epigastrium). Symptoms involving different body quadrants, noncontiguous areas, or multiple organ systems are not localized.

ANNOTATION

Patients experiencing chronic problems with localized or regional symptoms often lend themselves to simple explanations or interventions that require specialized expertise. Because of the need for specialized knowledge, these explanations and treatments have remained unconsidered (e.g., arthroscopy for chronic orthopedic illnesses). In this situation, extended evaluations involving multiple body systems or regions are likely to be inappropriate. Instead, an in depth but localized or anatomic approach at the hands of a specialist may be needed.

XX. Acute Unexplained Symptoms or Signs/Multiple Chronic Unexplained Physical Symptoms

DEFINITION

One of the main obstacles to understanding medically unexplained symptoms is the confusing terminology sometimes applied to them. For clarity, the Guideline adopts a consistent terminology. "Unexplained symptoms" or "medically unexplained symptoms" are the terms used to describe physical symptoms that provoke care-seeking, but have no clinically determined pathogenesis after an appropriately thorough diagnostic evaluation (Engel and Katon, 1999). Clinicians, scientists, symptomatic individuals, the media, employers, and other groups frequently apply labels to unexplained symptoms for different purposes. These labels may communicate an implied pathogenesis, such as chronic fatigue syndrome (infectious), certain low-level chemical sensitivities (allergic), somatoform disorders (psychiatric), and fibromyalgia (rheumatologic). The Guideline will rely on the more generic "medically unexplained symptoms" or

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Y. Discuss Issues with Patient, Provide Reassurance and Education, and Reinforce Patient-Clinician Partnership

OBJECTIVE

Maintain collaboration and convey optimism and future options for assistance.

ANNOTATION

Most patients at this point will feel hopeless, helpless, and mistrustful. The most important message to convey is the availability of help even though the specific cause for their concerns has not been identified. In approximately one out of three patients presenting with a physical symptom, a physical cause could not be identified upon medical evaluation (Kroenke, 1989; Kroenke, 1994; Marple, 1997).

Helpful techniques for conveying optimism to the patient include the following:

- Introduce the notion to the patient that medically unexplained symptoms are distressing and counseling may help them cope.
- Explain to the patient the common nature of medically unexplained symptoms in routine practice.
- Encourage the use of a symptom diary or journal.
- Provide health promoting educational handouts.
- Encourage behavior modification, exercise, weight loss, diet modification, and sleep hygiene.
- Encourage the reduction or cessation of alcohol, tobacco, and caffeine.
- Counsel the patient on the notion that "more care is not better care" and may cause "more harm than good."
- Advise as to the adverse effects of polypharmacy and specific medications (i.e., opioids, benzodiazepines, and related compounds).
- Emphasize that no catastrophic or progressive diseases have been found despite extensive work-up and consider the possibility of a sleep disorder disease.

This level of education is often helpful to present in a group format.

The clinician should refocus the attention from symptoms to improving patient functioning. Potentially modifiable psychosocial barriers to patient functioning could include:

- Living environment—Homelessness can perpetuate chronic illness as the result of environmental exposure and virtually non-existent personal hygiene.
- Support systems—Negative support on the part of the spouse, family, or significant other can impair and even worsen functionality.
- Job—Workplace factors have been associated with illness-related behavior.
- Finances—disability compensation can perpetuate illness by requiring continuing symptoms and disability for the worker to be eligible for benefits.

DISCUSSION

Physical symptoms account for more than half of all outpatient visits each year in the United States — an estimated 400 million visits. The data collected from general population surveys help to clarify the types and frequency of physical symptoms experienced in the general population. Table III presents six types of physical symptoms and compares the frequency of these symptoms among the general population and survey respondents.

Table III: Types and Frequency of Physical Symptoms Among Outpatients (1989-1994)

Physical Symptoms	Prevalence in General Population	Prevalence Among Survey Respondents
Fatigue	22 percent	58 percent
Joint pain	26 percent	59 percent
Headaches	21 percent	37 percent
Sleep Difficulties	15 percent	35 percent
Dyspnea	14 percent	32 percent
Abdominal Pain	11 percent	24 percent

(Kroenke, 1989, Kroenke, 1990, Kroenke, 1993, Kroenke, 1994)

The National Ambulatory Medical Care Survey (NAMCS) data of 1989 similarly found that patient concerns of fatigue, headaches, joint pains, and skin rashes resulted in an estimated 47.6 million outpatient visits. The estimated number of outpatient visits for fatigue was 7 million; for headaches, 9.6 million; for joint pains, 17 million; and for skin rashes, 14 million. It was also found that many patients experience more than one symptom.

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Z. Follow-Up—Monitor Changes in Patient Status

OBJECTIVE

Establish the patient's functional baseline and monitor for changes in general health and functional status that may require specific intervention.

ANNOTATION

A patient reaching this point in the algorithm requires "watchful waiting" as the primary mode of treatment. The components of watchful waiting in the patient with previously evaluated, but thus far medically unexplained, physical symptoms or signs include the following (Engel & Katon 1999):

- Use diagnostic testing conservatively. Order new tests based upon clinical suspicion only, rather than in a "shotgun" fashion. Except under unusual circumstances, testing should be done only when there are acute changes in the patient's clinical status that involve objective signs. Avoid ordering new tests for subjective findings or findings that represent acute exacerbations in an already chronic pattern of symptomatology, so-called "flare-ups" of symptoms.
- Use follow-up visits as an opportunity to review and explain prior testing the patient has received and what it means, accentuating normal findings unless abnormal findings have some specific clinical meaning (i.e., don't confuse the patient with equivocal findings of unknown significance).
- Avoid the use of multiple symptomatic medication treatments as adverse effects of medications increase the risk of harm. Polypharmacy is a common source of morbidity in these patients because they visit physicians often and over extended periods.
- Avoid the use of medications that are harmful if taken for long periods, such as narcotic analgesics or central nervous system depressants (e.g., sedatives, "muscle relaxers", barbiturate formulations such as Fiorinal or Fioricet, benzodiazepines, and related anxiolytics).
- Offer targeted reassurance. Blanket reassurance often leaves the patient feeling as though the clinician does not understand his or her specific concern. Instead, aim reassurance at specific beliefs or misinformation.
- Negotiate behavioral goals collaboratively with the patient. Identify, with patient input, what health behaviors are important to modify. Avoid becoming proscriptive; for example, you may think the patient is obese, but unless the patient sees his or her weight as a problem, clinician directives to lose weight will fall on deaf ears. Worse yet, clinician directives may alienate the patient and reduce adherence to the overall management plan.
- Encourage physical and role reactivation. In the absence of a clear diagnosis, this is usually the major behavioral goal: maximizing and sustaining the patient's ability to function. Inquire at each visit about how the patient is functioning. Look for nonjudgmental ways to incrementally maximize physical activity levels, remembering that efforts must "start low and go slow" in the setting of chronic inactivity.
- Maximally involve social supports.
- Ensure continuity of care. Organize the patient's care around a single clinician and make visits time contingent (scheduled rather than "PRN" for exacerbations of chronic symptoms). Optimal frequency of visits is generally 4-6 weeks.
- Use consultant resources judiciously. Specialists will often tend to over-emphasize *new* diagnostic evaluations, often reordering previously ordered tests. This can lead to false positive findings and iatrogenesis.
- Consider consulting with a mental health specialist for patients who seem inordinately distressed by their symptoms. Be sure, however, to explain the reason for the consultation to both the consultant and the patient. Most patients will feel that their credibility is being questioned or that they are being accused of "imagining" their symptoms when sent to a mental health specialist. In the military, they may also fear that the consultation will have career implications. Mental health consultation should only be made when it is acceptable to the patient, except under circumstances

of a psychiatric emergency, which usually means that the patient represents an immediate threat of harm to self or others.

Measurement requirements:

Recently-deployed populations are at risk for health concerns, so careful health monitoring of individuals seeking post-deployment care is essential. Accordingly, there are specific measurement requirements. The Short-Form Health Survey-36 (SF-36) has been widely used in clinical settings to assess functional status and general health across eight dimensions (Ware, 1992) (see Appendix C). A veteran-specific instrument has been developed (SF-36V) that differs only slightly from the original tool in providing a spectrum of responses to two questions regarding work or leisure-time limitations due to physical or emotional problems (Kazis, 1999; Kazis, 1998). The SF-36V assessment tool has been used to assess functional status in over 1.5 million veterans who receive care at VA medical facilities.

DISCUSSION

To increase its importance in clinical care, the VA Under Secretary for Health recently designated "Functional Status" as one of the domains of value for the VA system. The SF-36 assessment tool measures functional health status over eight dimensions:

- Physical functioning (10 questions)
- Social functioning (10 questions)
- Role limitations due to physical problems (4 questions)
- Role limitations due to emotional problems (3 questions)
- Mental health (5 Questions)
- Energy/vitality (4 Questions)
- Pain (2 questions)
- General health perception (5 Questions)

Two summary scales, the Physical Component Score (PCS) and Mental Component Score (MCS), are generated from the scores obtained on these eight dimensions. Scores for each dimension are standardized to a 0-100 point scale and the lower the score, the higher the level of dysfunction. The MCS and PCS scores are standardized to a "50-10" scale with the mean score equal to 50 for the general U.S. population, and the standard deviation equal to a 10-unit difference. Similar scoring schemes have been used for presentation and interpretation of the scores on the eight dimensions as well.

The advantages of the SF-36X include the measurement of health status across several dimensions, brevity, and ease of administration in both interviewer- and self-administered settings, and the ability to measure health status in a range where changes and effects are most likely to be detected. Limitations include the lack of condition specificity. It has been shown that disease specific instruments outperform the SF-36X when the primary focus is on a particular pathologic process (e.g., inflammatory bowel and coronary artery diseases) (Guyatt, 1989; Spertus, 1995).

STANDARD ASSESSMENT TOOL WEB SITES

- www.rand.org
- www.sf-36.com
- www.outcomes-trust.org/instruments
- www.qlmed.org/SF-36

STANDARD HEALTH ASSESSMENT TOOLS (See Appendix C)

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AA. Provide Patient Education

OBJECTIVE

Provide health education to patient and family.

ANNOTATION

Patient Education is one of the most important responsibilities of the clinician. It is facilitated by attention to the patient's expectations, beliefs, and decisions.

Patients bring a set of beliefs about themselves and the meaning of their symptoms and environmental exposures into encounters with their clinician. Patient's expectations of illness and the consequences of exposures may differ significantly from scientific models. The goals of the clinician should include

attempting to understand the patient's beliefs, informing the patient about pertinent scientific information, and establishing a collaborative and negotiated understanding upon which further communication and work can be based. Some forms of patient education may be more effective if provided by other members of the health care team or in a group setting.

BB. Are There Indications for Collaboration with a Deployment Health Center (DHC)?

OBJECTIVE

Determine whether collaboration with a DHC will aid in the treatment of the patient's diagnosed illness.

ANNOTATION

Referral centers have been designated in both DoD and VHA facilities. Consultation with these centers offers the clinician and patient access to clinicians with special expertise and experience, entry into approved clinical trials, and diagnostic testing and evaluation that may not be available locally or at other referral centers.

If the clinical evaluation reveals a well-defined diagnosis with a widely accepted treatment protocol, and the patient is willing to accept this diagnosis as the cause of signs or symptoms, the clinician should begin therapy at the local facility. The clinician should attempt to reach an agreement with the patient on an appropriate interval of time to reassess signs, symptoms, and concerns and jointly determine whether further evaluation is necessary. The clinician should consider collaboration with, and the possible referral to, a DHC to ensure that deployment-related health concerns receive full consideration.

If the clinical evaluation reveals a diagnosis or disease entity that is newly defined or the effective treatment protocol has not been established for the diagnosis, the clinician and patient may benefit from collaboration with a DHC. Collaboration may occur through in-person, telephonic, or other written communication depending on the level of clinical urgency. Consultation with these centers offers the clinician and patient access to practitioners with special expertise and experience, entry into approved clinical trials, and diagnostic testing and evaluation that may not be available locally or at other referral centers.

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CC. Establish Contact and Collaborate with a Deployment Health Center (DHC)

OBJECTIVE

Contact and collaborate with the assistance of a DHC to manage complicated deployment-related health care concerns.

ANNOTATION

Referral centers have been designated in both DoD and VHA facilities. Consultation with these centers offers the health care provider and patient access to clinicians with special expertise and experience, entry

into approved clinical trials, and diagnostic testing and evaluation that may not be available locally or at other referral centers.

DD. Follow-Up as Indicated

OBJECTIVE

Assure the patient's current deployment related health concern is resolved.

ANNOTATION

As part of the overall treatment plan, the clinician should continue to provide patient instruction and monitor the course of the patient's illness for the effectiveness of treatment and potential identification of new concerns in each follow-up appointment. The clinician and patient should determine the frequency of visits based on clinical indications and patient need.

The clinician should match the patent's diagnosis with the specific deployment event when possible and report deployment related health concerns, as appropriate.